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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/294,563 04/20/99 SCHMIDT

K 08640/018001

024313  
TERADYNE, INC  
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BOSTON MA 02118

WM01/0801

EXAMINER

NGUYEN, D

ART UNIT

PAPER NUMBER

2643

DATE MAILED:

08/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/294,563

Applicant(s)

SCHMIDT ET AL.

Examiner

Duc M Nguyen

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2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 34-52 is/are allowed.
- 6) ☒ Claim(s) 19,21,24,26,29-31 and 53-57 is/are rejected.
- 7) ☒ Claim(s) 20,22,23,25,27,28,32 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 24, 26, 29, 31, 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Amrany et al (6,192,109).

Consider claims 24, 26. Amrany teaches obtaining measurements to determine electrical properties of the subscriber line (measuring the line impedance; col. 3, ln. 33-45); identifying that the subscriber line has a specific physical structure in response to finding a match with one of the model line that has the specific physical structure (impedance of typical twisted-pair loop; col. 3, ln. 33 to col. 4, ln. 27); and using the identified specific physical structure to classify the subscriber line for data service (high speed data rate or low speed data rate; col. 3, ln. 33 to col. 4, ln. 27).

Consider claim 29. Amrany teaches a system for characterizing performance of customer lines for data transmission, comprising a computer (DSP 114); a telephone switch (central office

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20; Figs. 3-4) coupled to the lines (24); and a measurement unit (Figs. 3-4; 102, 104, 106, 108, 112, 116, 118, 120, 122, 124, 126, 130, 134; col. 6, ln. 53 to col. 9, ln. 34).

Consider claim 31. Amrany teaches obtaining measurements to determine electrical properties of the subscriber line (see figures 2-4; measuring the line impedance; col. 3, ln. 33-45); identifying that the subscriber line has a specific physical structure in response to finding a match with one of the model line that has the specific physical structure (impedance of typical twisted-pair loop; col. 3, ln. 33 to col. 4, ln. 27); using the identified specific physical structure to classify the subscriber line for data service (high speed data rate or low speed data rate; col. 3, ln. 33 to col. 4, ln. 27); and predicting whether the selected line is disqualified for data transmission from the measurements thereon (connections of the transceiver are short circuit; col. 7, ln. 47 to col. 9, ln. 34).

Consider claim 53. Amrany teaches obtaining one-ended measurements to determine electrical properties of the subscriber line (measuring the line impedance; col. 3, ln. 33-45; col. 6, ln. 53 to col. 7, ln. 46); determining one or more admittances as a function of frequency of the customer line from the measurements (impedance of typical twisted-pair loop; col. 3, ln. 33 to col. 4, ln. 27; col. 7, ln. 47 to col. 9, ln. 34); and detecting that the customer line has a bridged tap in response to finding a signature of a bridged tap in the one or more admittances as a function of frequency (branches 26, 52; 27, 54; 29, 56; and 90 represent the bridged taps; col. 7, ln. 47 to col. 8, ln. 16).

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3. Claims 53-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Borchert et al (5,461,318).

Consider claims 53-57. Borchert teaches the limitations of claims 53-57 in the abstract; figures 1-7; col. 3, ln 20-60; col. 10, ln 48 to col. 12, ln 30; **figures 23-24; col. 10, ln. 41 to col. 11, ln. 2.**

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amrany et al (6,192,109) in view of Burgess (6,111,861).

Consider claim 19. Amrany teaches obtaining measurements to determine electrical properties of the subscriber line (measuring the line impedance; col. 3, ln. 33-45); identifying that the subscriber line has a specific physical structure in response to finding a match with one of the model line that has the specific physical structure (impedance of typical twisted-pair loop; col. 3,

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ln. 33 to col. 4, ln. 27); using the identified specific physical structure to classify the subscriber line for data service (high speed data rate or low speed data rate; col. 3, ln. 33 to col. 4, ln. 27);

Amrany does not teach selecting billing rates at prices that depend on the speed qualification of the portion.

Burgess teaches determining whether the line at issue is billed as a high speed analog data line or an analog voice (or low speed analog data) line (col. 10, ln. 21-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Burgess into the teachings of Amrany, so that appropriate charging rate can be accurately applied to the communication connection.

Consider claim 21. (Amrany, Col. 6, ln. 53 to col. 9, ln. 34) read on the limitations of claim 21.

***Allowable Subject Matter***

6. Claims 20, 22-23, 25, 27-28, 30, 32-33, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 1-18, 34-52 are allowed.

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***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is (703) 308-7527.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Kuntz, can be reached on (703) 305-4708.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 308-6306 or (703) 308-6296**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

July 25, 2001

*DN*  
**DUC NGUYEN  
PRIMARY EXAMINER**